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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,804	10/20/2003	Daniel P. Sanders	137-3	4361
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BAHRET & ASSOCIATES 320 NORTH MERIDIAN STREET SUITE 510 INDIANAPOLIS, IN 46204			THERIAULT, STEVEN B	
			ART UNIT	PAPER NUMBER
			2179	

DATE MAILED: 09/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/689,804

Applicant(s)

SANDERS ET AL.

Examiner

Steven B. Theriault

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-81 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19, 22-24, 36, 39, 53, 56, 64, 67 and 72 is/are allowed.
- 6) ☒ Claim(s) 1-18, 20, 21, 25-35, 37, 38, 40-52, 54, 55, 57-63, 65, 66, 68-71 and 73-81 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/2003 | 12 29 03
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. This action is responsive to the following communications: The original application filed on 10/20/2003, which is a CIP of application 09/899,431 and an information disclosure statement filed 12/29/2003.
2. Claims 1-81 are pending in the case. Claims 1, 5, 25, 42 and 57 and 68 and 75 are the independent claims.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 5 and 25 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 57 of U.S. Patent No. 09/899,431 (hereinafter 431') that is in condition for allowance. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following similarities:

With respect to the present application claim 5 and the 431' patent claim 1, when we compare the claims we find the following highlighted similarities:

request of an image on a remote system, the remote system must give an indication to the moderator that the desired object exists on the remote system and therefore the indication is a form of request/reply. Therefore, the limitation of a database and a request/reply mechanism would have been obvious in view of '431 because of the taught panel Id's and the ability for the user to see the panel Id that is located on the participant station and put in a request to transfer it to the moderator station.

With respect to the present application claim 25 and the 431' patent claim 57, when we compare the claims we find the following highlighted similarities:

Claim 25 of the present application

A network of computers programmed for knowledge transfer in a group setting, the network comprising:

- A server comprising a database;
 - A plurality of participant workstations, each programmed to provide a participant work area and having at least one corresponding participant input-device, and each of the participant input-devices being adapted to create data structures defining participant images that are then included on the participant work area;
 - A moderator workstation, programmed to provide a moderator work area and comprising at least one moderator input-device, the at least one moderator input-device being adapted to:
 - Create data structures defining moderator images that are then included on the moderator work area, and
 - Select moderator images that are then simultaneously included on each of plurality of participant work areas;
 - Wherein the data structures are stored in the database;
 - Wherein the moderator work area comprises a moderator public scroll and a moderator private scroll, and each participant work area comprises a participant public scroll and a participant private scroll;
 - Wherein each participant workstation displays images placed on the participant's public scroll by the moderator superimposed on images placed on the participant's public scroll by the participant;
 - Wherein the moderator input-device is further adapted to select participant images from any of the plurality of participant work areas that are then included on the moderator work area.

Claim 1 of the 431' application

(Currently amended) A network of computers programmed for knowledge transfer in a group setting, the network comprising:

- A plurality of participant workstations, each programmed to provide a participant work area and having at least one corresponding participant input-device and each of the participant input-devices being adapted to create data structures defining participant images that are then included on the participant work area;
- A moderator workstation, programmed to provide a moderator work area and comprising at least one moderator input-device, the at least one moderator input-device being adapted to:
 - Create data structures defining moderator images that are then included on the moderator work area;
 - Select moderator images that are then simultaneously included on each of plurality of participant work areas;
 - wherein the moderator work area comprises a moderator public scroll and a moderator private scroll, and each participant work area comprises a participant public scroll and a participant private scroll;
 - wherein each participant workstation displays images placed on the participant's public scroll by the moderator superimposed on images placed on the participant's public scroll by the participant's and wherein the moderator input-device is further adapted to select participant images from any of the plurality of participant work areas that are then included on the moderator work area;
- Further comprising collision-avoidance functionality that permits the participant to place footnote images on the participant work area that provide a link between the footnote images and corresponding images that are not typically superimposed on a shared work area.

The present application discloses a database and where the data structures are stored in the database. The 431' application discloses a collision avoidance function where footnote images and corresponding images are not superimposed on the shared work area. However the limitation of a database to store images and the collision avoidance mechanism are disclosed in the 431' application. Therefore, It would have been obvious to one of ordinary skill in the art at the time of the invention, in view of the 431' application that the limitation of a database and the collision avoidance function would allow for storing of data structures and providing a mechanism to prevent users from placing images in the same location.

Claim Rejections - 35 USC § 103

5. **The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:**

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. **The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:**

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claim 5 of the present application

A network of computers programmed for knowledge transfer in a group setting, the network comprising:

- A server comprising a database;
- A plurality of participant workstations, each programmed to provide a participant work area and having at least one corresponding participant input-device, and each of the participant input-devices being adapted to create data structures defining participant images that are then included in the participant work area;
- A moderator workstation, programmed to provide a moderator work area and comprising at least one moderator input-device, the at least one moderator input-device being adapted to:
 - Create data structures defining moderator images that are then included in the moderator work area, and
 - To select moderator images that are then simultaneously included on each of plurality of participant work areas;
- Wherein the data structures are stored in the database;
- Wherein the moderator input-device is further adapted to select participant images from any of the plurality of participant work areas that are then included on the moderator work area

Claim 1 of the 431' application

A system for knowledge transfer in a group setting, the system comprising:

- A plurality of participant workstations, each adapted to provide a participant work area having a plurality of panels, each participant workstation, having at least one corresponding participant input-device and participant display, and each of the participant input-devices being adapted to define participant images that are then included on the corresponding participant work area;
- A moderator workstation, comprising at least one moderator input-device and adapted to provide a moderator work area having a plurality of panels, the at least one moderator input-device being adapted to define moderator images that are then included on the moderator work area and to select moderator images that are then simultaneously included on each of the participant work areas;
- Wherein the moderator input-device is further adapted to select participant images from any of the plurality of participant work areas that are then included on the moderator work area;
- Wherein the moderator workstation is adapted to identify a panel not currently displayed in a selected participant work area and to transmit a request message to the corresponding participant workstation for the identified panel;
- Wherein the corresponding participant workstation is adapted to transmit the identified panel to the moderator workstation in response to the request message.

The present application recites a database, and also does not disclose:

A plurality of panels; the request generated by a moderator workstation of a participant workstation to transfer image information; However, the 431' application does describe a panel storage where the panels have an ID and can be requested to be displayed by the indexed storage number, which is a form of a database. Further, the 431' application does that the moderator input device is adapted to select **any image from a plurality of areas** and then include them in the moderator area. It is in the examiners interpretation that at the time of the invention, one of ordinary skill in the art would interpret the claim scope of "any" image to include those not displayed at the current time but those in memory. Further, for a user to make a

7. **Claims 1-18, 20-21, 42-52, 54, 55, 57-63, 65-66, 68-71, and 73-81 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Katsurabayashi et al (hereinafter Katsurabayashi) U.S. Patent No. 5,996,002 issued Nov. 30, 1999 and filed Jul. 23, 1997.**

In regard to **Independent claim 1**, Katsurabayashi teaches a system for transferring knowledge between a plurality of users with a shared drawing surface, the system comprising:

- A plurality of work areas, (Katsurabayashi Figure 2 and 3 and column 4, lines 22-37) Katsurabayashi teaches a collaborative work system where the users share a work area.
- *Each comprising a main layer, a background layer, a participant layer, and a moderator layer; In the alternative, if the “main, background, participant and moderator layer” is interpreted as meaning “a layer constitutes data for one screen image and where multiple images and layers can exist on the display overlapped ”, then the following rejection applies.* Katsurabayashi teaches a display where the page in the display is comprised of a spatial series of layers. Katsurabayashi teaches a display layer, which can be considered the main layer. Katsurabayashi further teaches a un-display layer which can be considered a background layer in which the display image can be un-displayed or faded into the background by the user. Katsurabayashi teaches an integrated layer and also teaches a writing layer which apply to both the participant and the moderator (Katsurabayashi column 7, lines 35-67 and column 8, lines 1-10). Katsurabayashi teaches that the system allows a user to place the mode of operation in either the asynchronous mode, which means a non-sharing state and a synchronous mode which means a sharing state. Katsurabayashi teaches the user is allowed to create any number of layers during the conference by adjusting or drawing on the previously

shared image. Each adjusting will be stored on the individual computer as a series of layer data in which the user can then change the mode to synchronous and given they have permission to update the shared area they can apply the changes they have made by adding the layers to the shared image. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, in view of Katsurabayashi, because of the taught advantage of utilizing layer control and the page composition of a plurality of layers where a user individual status for sharing information depends on the state of the application and permissions.

With respect to **dependent claims 2-4**, Katsurabayashi teaches the system wherein the plurality of work areas comprises:

- *A moderator work area;* (Katsurabayashi column 8, lines 1-5 and 21-35)
Katsurabayashi teaches a shared area where each user must seek permission to update the workspace shared by a plurality of participants. Katsurabayashi teaches the ability to turn a shared area into an individual area on a particular desktop by switching the mode of the station to asynchronous from synchronous. Therefore, the participant has their own area and a shared area depending on the mode. All of the individual data is stored separately and merged with the shared data into the display during the user selected transmission time. Further, Katsurabayashi teaches a chairman giving a discussion and where the same chairman is the only person granted access permission to the shared workspace, which is considered a moderator area.
- *A plurality of participant work areas, each comprising functionality to create a participant erase object, the participant erase object defining an area of the shared drawing surface in which a corresponding portion of the participant layer is replaced with a corresponding portion of the background layer, and a corresponding portion of the main layer is replaced with a corresponding portion of the moderator layer* (Katsurabayashi column 7, lines 7-25 and column 16, lines 41-55) Katsurabayashi

teaches a plurality of work areas on separate and individual machines and where the individual submits at submission time a writing layer (main) into the shared work area. Katsurabayashi teaches where the writing layer becomes the other layer of the main display at submission time. Further, Katsurabayashi teaches a variety of methods to create an integrated layer on the display and where an individual image comprises a layer and where the integrated layer can be a compilation of all of the layers within a display or the layers that the user chooses to combine. The user can combine the layers in any order or particular design they choose as each layer has a specific ID and control to integrate or not. Katsurabayashi further teaches a undisplay layer and permissions associated with a layer and space where the user can undisplay any layer they have permissions to within the display. Therefore, Katsurabayashi teaches the ability to have a given user incorporate any layer into the shared space they wish and then undisplay the same layer, which is a erase option and depending on the mode of the workstation the user could be the moderator or the participant.

In regard to **Independent claim 5**, Katsurabayashi teaches a network of computers programmed for knowledge transfer in a group setting, the network comprising:

- *A server comprising a database;* (Katsurabayashi Fig. 1, 2, 3, 4A and column 9, lines 5-35) Katsurabayashi teaches a database and network of computers connected together for the purpose of group collaboration and for storing individual and shared images, video, audio and media as layers in memory separately.
- *A plurality of participant workstations, each programmed to provide a participant work area and having at least one corresponding participant input-device, and each of the participant input-devices being adapted to create data structures defining participant images that are then included the participant work area;*(Katsurabayashi Figure 12) shows a plurality of workstations and where the user can switch the computer to

asynchronous mode which allows the user to have a private space. Katsurabayashi further teaches the input of images in the work area and where the system records media as it is input in the display through input devices such as a microphone, camera and mouse etc.

- *A moderator workstation, programmed to provide a moderator work area and comprising at least one moderator input-device, the at least one moderator input-device being adapted to:*
 - *Create data structures defining moderator images that are then included in the moderator work area, and*
 - *To select moderator images that are then simultaneously included on each of plurality of participant work areas;*(Katsurabayashi column 7, lines 7-35 and column 8, lines 20-45) Katsurabayashi teaches an individual can retain the permission to update the shared area while all other participants would not have the permission to update. By updating the shared space a CEO could give a discussion and use the input device while all others watch the presentation in synchronous mode. The CEO could switch back and forth between synchronous and asynchronous mode to create and draw on the space and then submit the changes to shared space, which would then be presented on the shared space of every individual.
- *Wherein the data structures are stored in the database;* (Katsurabayashi fig.4a-4b and column 9, lines 5-15) Katsurabayashi shows the storage of requests, layers and timing information in a database.
- *Wherein the moderator input-device is further adapted to select participant images from any of the plurality of participant work areas that are then included on the moderator work area* (Katsurabayashi column 9, lines 50-67 and column 10, lines 9-57) Katsurabayashi teaches the ability to control the process of sending a layer to others at intervals or with instruction and Katsurabayashi teaches the ability to request access to information in the shared space which would allow someone to make a request for information from participant where a layer is stored on an individual machine and the file is sent to the requestor.

With respect to **dependent claim 6**, Katsurabayashi teaches the *network wherein the moderator work area comprises a main layer, a moderator layer, a first participant layer, and a background layer* **In the alternative, if the “main, background, participant and moderator layer” is interpreted as meaning “a layer constitutes data for one screen image and where multiple images and layers can exist on the display overlapped ”, then the following rejection applies.** Katsurabayashi teaches a network of computers (see Figure 2).

Katsurabayashi also teaches a display where the page in the display is comprised of a spatial series of layers. Katsurabayashi teaches a display layer, which can be considered the main layer. Katsurabayashi further teaches a un-display layer which can be considered a background layer in which the display image can be un-displayed or faded into the background by the user.

Katsurabayashi teaches an integrated layer and also teaches a writing layer which apply to both the participant and the moderator (Katsurabayashi column 7, lines 35-67 and column 8, lines 1-10). Katsurabayashi teaches that the system allows a user to place the mode of operation in either the asynchronous mode, which means a non-sharing state and a synchronous mode, which means a sharing state. Katsurabayashi teaches the user is allowed to create any number of layers during the conference by adjusting or drawing on the previously shared image. Each adjusting will be stored on the individual computer as a series of layer data in which the user can then change the mode to synchronous and given they have permission to update the shared area they can apply the changes they have made by adding the layers to the shared image.

With respect to **dependent claim 7**, Katsurabayashi teaches *the network, wherein each participant's workstation displays a participant's main layer, the participant's main layer being a composite of the moderator layer, the background layer, a second participant layer* (Katsurabayashi Figure 2 and column 7, lines 34-57 and column 11, lines 25-45) Katsurabayashi teaches a page on the display consists of a plurality of layers. The page layers are a writing layer (main), which consists of any number of integrated and individual layers, an undisplay layer, and

other layers, which can all be controlled by the user and associated through layer and page ids. Katsurabayashi further teaches that any given page in the shared display area comprises all of the submitted individual layers at any one point of the discussion (column 16, lines 40-55).

With respect to **dependent claim 8**, Katsurabayashi teaches *the network wherein the network can be used in a group mode and a standalone mode* (Katsurabayashi column 7, lines 5-40) Katsurabayashi teaches the system allows each user to control the sharing mode from either asynchronous to synchronous. Further, Katsurabayashi teaches that all of the users can be synchronous or where any combination of users can be in asynchronous mode, which would include one user in asynchronous and the others in synchronous.

With respect to **dependent claims 9 -11**, Katsurabayashi teaches *the network, wherein the workstations are located such that a first user positioned to use a workstation and a second user positioned to use a different workstation can hear each other speak* (Katsurabayashi column 8, lines 1-15 and column 20, lines 40-50 Katsurabayashi teaches the recording and playback of multimedia which includes video and audio and the use of a microphone. The data is stored into the individual layers and submitted by the user each time they make a change or contribution. Further, Katsurabayashi teaches the playback time starts after the playback is invoked, which as the user is in synchronous mode would be immediately. Therefore, each user on the network can hear a specific person that has permission to update the shared space or all of the users that have permission.

With respect to **dependent claim 12**, Katsurabayashi teaches *the network, wherein images are organized in notebook data structures comprising at least one panel* (Katsurabayashi column 23, lines 1-32) Katsurabayashi teaches a screen where the layers are displayed in a sequence depicting a discussion flow or group opinion flow. The sequencing of opinions show how the

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discussion changed points 9column 24, lines 60-67) which is analogous to writing in a notebook as a sequence of steps.

With respect to **dependent claim 13**, Katsurabayashi teaches the network, wherein the images are stored as at least one object in a single panel (Katsurabayashi Figure 3) Katsurabayashi teaches a single page comprised of a plurality of layers with at least one object in the panel. Column 7, lines 35-67).

With respect to **dependent claims 14 – 15**, Katsurabayashi teaches *the network wherein images placed on a participant's work area at a participant workstation may be viewed only at that workstation unless an instruction to permit the images to be viewed from another workstation is given at the participant workstation providing the participant's work area and where viewing at another workstation causes data structure to be transferred to another workstation* (Katsurabayashi column 7, lines 5-25 and column 8, lines 1-5 and column 13, lines 1-5) Katsurabayashi teaches the individual submits the request to be in either the synchronous or asynchronous mode. While in the asynchronous mode no other person can see the space on the individual workstation without permission. Katsurabayashi also teaches where the data sent is transferred over the network of computers (see figure 2 and column 24, lines 25-30).

With respect to **dependent claims 16 -18**, Katsurabayashi teaches *the network further comprising collision- correction functionality and the ability to adjust the view modes* **In the alternative, if the “view mode” is interpreted as meaning “a layer control exists to allow a user to undisplay or control what is displayed and when ”, then the following rejection applies.** In the present application specification, the applicant defines collision control as permitting users to work around collisions as they occur in the workspace and where participants can toggle through modes showing the layer with the collision of images, with only the first image submitted and the shared space (see page 10,Para 3 and 4). Katsurabayashi teaches the ability

to control through a layer control and undisplay mode the display of images. Taken in combination with the asynchronous and synchronous control the users would be able to work around conflicts by adjusting the layers visible or non-visible and adjusting which layers are sent to the workspace when a collision occurs (Column 7, lines 5-40 and column 11, lines 25-45 and column 12, lines 1-36).

With respect to **dependent claim 20**, Katsurabayashi teaches the network further comprising collision-avoidance functionality (Katsurabayashi column 23, lines 50-67) Katsurabayashi teaches a collision avoidance mechanism where collision are avoided through a permission mechanism.

With respect to **dependent claim 21**, Katsurabayashi teaches the network wherein the collision-avoidance functionality comprises a margin that does not have a corresponding location of the shared work area (Katsurabayashi column 7, lines 65-67 and column 8, lines 1-5 and column 12, lines 14-24). Katsurabayashi teaches the ability of a user to designate a layer that is to be displayed or not and therefore a given participant can write on a layer and not submit the layer and mark it to not be displayed which would be a margin area that is not displayed on the shared workspace.

In regard to **Independent claim 42**, A network of computers programmed for knowledge transfer in a group setting, the network comprising:

- *A plurality of participant workstations, each programmed to provide a participant work area and having at least one corresponding participant input-device, each of the participant input-devices being adapted to create data structures defining participant images that are then included on the participant work area;*(Katsurabayashi Figure 12) shows a plurality of workstations and where the user can switch the computer to asynchronous mode which allows the user to have a private space. Katsurabayashi

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further teaches the input of images in the work area and where the system records media as it is input in the display through input devices such as a microphone, camera and mouse etc.

- *A moderator workstation, programmed to provide a moderator work area and comprising at least one moderator input-device, the at least one moderator input-device being adapted to:*
 - *Create data structures defining moderator images that are then included on the moderator work area,*
 - *To select moderator images that are then simultaneously included on each of plurality of participant work areas;*
- (Katsurabayashi column 7, lines 7-35 and column 8, lines 20-45) Katsurabayashi

teaches an individual can retain the permission to update the shared area while all other participants would not have the permission to update. By updating the shared space a CEO could give a discussion and use the input device while all others watch the presentation in synchronous mode. The CEO could switch back and forth between synchronous and asynchronous mode to create and draw on the space and then submit the changes to shared space, which would then be presented on the shared space of every individual.

- Wherein the moderator work area comprises a main layer, a moderator layer, a participant layer, and a background layer; Wherein each participant work station comprises a participant's virtual drawing surface, the virtual drawing surface comprising:
 - A main layer;
 - A participant layer;
 - A moderator layer common to the moderator's work area;
 - A background layer common to the moderator's work area;

In the alternative, if the “main, background, participant and moderator layer” is interpreted as meaning “a layer constitutes data for one screen image and where multiple images and layers can exist on the display overlapped”, then the

following rejection applies. Katsurabayashi teaches a display where the page in the display is comprised of a spatial series of layers. Katsurabayashi teaches a display layer, which can be considered the main layer. Katsurabayashi further teaches a un-display layer which can be considered a background layer in which the display image can be un-displayed or faded into the background by the user. Katsurabayashi teaches an integrated layer and also teaches a writing layer which apply to both the participant and the moderator (Katsurabayashi column 7, lines 35-67 and column 8, lines 1-10). Katsurabayashi teaches that the system allows a user to place the mode of operation in either the asynchronous mode, which means a non-sharing state and a synchronous mode, which means a sharing state. Katsurabayashi teaches the user is allowed to create any number of layers during the conference by adjusting or drawing on the previously shared image. Each adjusting will be stored on the individual computer as a series of layer data in which the user can then change the mode to synchronous and given they have permission to update the shared area they can apply the changes they have made by adding the layers to the shared image. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, in view of Katsurabayashi, because of the taught advantage of utilizing layer control and the page composition of a plurality of layers where a user individual status for sharing information depends on the state of the application and permissions.

- *Wherein the moderator input-device is further adapted to select participant layers from any of the plurality of participant work areas that are then placed on the moderator's participant layer; (Katsurabayashi column 9, lines 50-67 and column 10, lines 9-57) Katsurabayashi teaches the ability to control the process of sending a layer to others at intervals or with instruction and Katsurabayashi teaches the ability to request access to information in the shared space which would allow someone to*

make a request for information from participant where a layer is stored on an individual machine and the file is sent to the requestor.

- *Wherein the network can be used in a group mode and a standalone mode;*
(Katsurabayashi column 7, lines 5-40) Katsurabayashi teaches the system allows each user to control the sharing mode from either asynchronous to synchronous. Further, Katsurabayashi teaches that all of the users can be synchronous or where any combination of users can be in asynchronous mode, which would include one user in asynchronous and the others in synchronous.
- *Wherein the workstations are located such that a first user positioned to use a workstation and a second user positioned to use a different workstation can hear each other speak* (Katsurabayashi column 8, lines 1-15 and column 20, lines 40-50) Katsurabayashi teaches the recording and playback of multimedia which includes video and audio and the use of a microphone. The data is stored into the individual layers and submitted by the user each time they make a change or contribution. Further, Katsurabayashi teaches the playback time starts after the playback is invoked, which as the user is in synchronous mode would be immediately. Therefore, each user on the network can hear a specific person that has permission to update the shared space or all of the users that have permission.

With respect to **dependent claim 43**, Katsurabayashi teaches the network wherein every user positioned to use a workstation can hear every other user positioned to use any other workstation (Katsurabayashi column 8, lines 1-15 and column 20, lines 40-50) Katsurabayashi teaches the recording and playback of multimedia which includes video and audio and the use of a microphone. The data is stored into the individual layers and submitted by the user each time they make a change or contribution. Further, Katsurabayashi teaches the playback time starts

after the playback is invoked, which as the user is in synchronous mode would be immediately.

Therefore, each user on the network can hear a specific person that has permission to update the shared space or all of the users that have permission.

With respect to **dependent claim 44**, Katsurabayashi teaches the network wherein data structures defining images are organized in notebook data structures comprising at least one panel (Katsurabayashi column 23, lines 1-32) Katsurabayashi teaches a screen where the layers are displayed in a sequence depicting a discussion flow or group opinion flow. The sequencing of opinions show how the discussion changed points 9column 24, lines 60-67) which is analogous to writing in a notebook as a sequence of steps.

With respect to **dependent claim 45**, Katsurabayashi teaches the network further comprising a server having a database residing thereon, and wherein the data structures defining the images are stored in the database (Katsurabayashi column 9, lines 5-15 and Figure 2 and 4a and 4b) Katsurabayashi teaches the data is stored on a network computer on either a hard disk, memory or other storage. Katsurabayashi also teaches that the data is stored in an indexed manner and is retrieved in an indexed manner, which would indicate a database for storing information. Further, a networked computer is analogous to a server.

With respect to **dependent claims 46-48**, Katsurabayashi *teaches the network wherein images placed on a participant work area at a participant workstation may be viewed only at that workstation unless a participant decides to permit it to be viewed from another workstation*

(Katsurabayashi column 7, lines 5-25 and column 8, lines 1-5 and column 13, lines 1-5)

Katsurabayashi teaches the individual submits the request to be in either the synchronous or asynchronous mode. While in the asynchronous mode no other person can see the space on the individual workstation without permission. Katsurabayashi also teaches where the data sent is transferred over the network of computers (see figure 2 and column 24, lines 25-30).

With respect to **dependent claims 49 - 52**, The network, further comprising collision-correction functionality and view mode toggling and placing images on the moderator area from a request **In the alternative, if the “view mode” is interpreted as meaning “a layer control exists to allow a user to undisplay or control what is displayed and when ”, then the following rejection applies.** In the present application specification, the applicant defines collision control as permitting users to work around collisions as they occur in the workspace and where participants can toggle through modes showing the layer with the collision of images, with only the first image submitted and the shared space (see page 10, Para 3 and 4). Katsurabayashi teaches the ability to control through a layer control and undisplay mode the display of images. Taken in combination with the asynchronous and synchronous control the users would be able to work around conflicts by adjusting the layers visible or non-visible and adjusting which layers are sent to the workspace when a collision occurs (Column 7, lines 5-40 and column 11, lines 25-45 and column 12, lines 1-36). Further, because of the ability for an individual user to control the layers by Id number and the sequence in how they are displayed and in combination with the permissions a moderator could be the only one with the permission to update and therefore would be able to display just the moderator integrated layer or be able to control the undisplay layer which is a background layer. If just one participant had access then just the participants layer would be displayed but other layers would also exist in the page and the same participant would be able to view the conflict or collision with another participant and is provided with the ability to move the image with a move command (column 15, lines 25-32).

With respect to **dependent claim 54**, Katsurabayashi *teaches the network further comprising collision-avoidance functionality* (Katsurabayashi column 23, lines 50-67). Katsurabayashi teaches a collision avoidance mechanism where collision are avoided through a permission mechanism.

With respect to **dependent claim 55**, Katsurabayashi *teaches the network wherein the collision-avoidance functionality comprises an area on the participant layer that does not overlap with either of the moderator layer and the background layer* (Katsurabayashi column 7, lines 5-45 and 65-67 and column 8, lines 1-5 and column 19, lines 5-20) Katsurabayashi teaches that user permissions control the access to a shared area and collision avoidance. Katsurabayashi also teaches where there are layers within a page and where the user has the choice to set a page layer to display or not. Further, Katsurabayashi teaches that a given page is a combination of shared and individual data and when a user move the mode of the application into asynchronous then the user is not sharing with other but has shared data in the area. The user also has the ability of layer control where they can choose which layers are integrated or not which would allow for a layer to be created and does not overlap the moderator or background layer (column 12, lines 5-50).

In regard to **Independent claim 57**, Katsurabayashi *teaches the network of computers* programmed for knowledge transfer in a group setting, the network comprising:

- *A server comprising a database;* (Katsurabayashi column 9, lines 5-15 and Figure 2 and 4a and 4b) Katsurabayashi teaches the data is stored on a network computer on a hard disk, memory or other storage. Katsurabayashi also teaches that the data is stored in an indexed manner and is retrieved in an indexed manner, which would indicate a database for storing information. Further, a networked computer is analogous to a server.
- *A plurality of participant workstations, each programmed to provide a participant work area and having at least one corresponding participant input-device, each of the participant input-devices being adapted to create data structures defining participant images that are then included on the participant work area;*(Katsurabayashi Figure 12) shows a plurality of workstations and where the user can switch the computer to

asynchronous mode which allows the user to have a private space. Katsurabayashi further teaches the input of images in the work area and where the system records media as it is input in the display through input devices such as a microphone, camera and mouse etc.

- *A moderator workstation, programmed to provide a moderator work area and comprising at least one moderator input-device, the at least one moderator input-device being adapted to:*
 - *Create data structures defining moderator images that are then included on the moderator Work area,*
 - *To select moderator images that are then simultaneously included on each of the plurality of participant work areas;*

(Katsurabayashi column 7, lines 7-35 and column 8, lines 20-45) Katsurabayashi teaches an individual can retain the permission to update the shared area while all other participants would not have the permission to update. By updating the shared space a CEO could give a discussion and use the input device while all others watch the presentation in synchronous mode. The CEO could switch back and forth between synchronous and asynchronous mode to create and draw on the space and then submit the changes to shared space, which would then be presented on the shared space of every individual.

- *Wherein the moderator work area comprises a main layer, a moderator layer, a participant layer, and a background layer; Wherein each participant work area comprises:*
 - *A main layer;*
 - *A participant layer,*
 - *A moderator layer common to the moderator work area;*
 - *A background layer common to the moderator work area;*

In the alternative, if the “main, background, participant and moderator layer” is

interpreted as meaning “a layer constitutes data for one screen image and where multiple images and layers can exist on the display overlapped”, then the following rejection applies. Katsurabayashi teaches a display where the page in the display is comprised of a spatial series of layers. Katsurabayashi teaches a display layer, which can be considered the main layer. Katsurabayashi further teaches a un-display layer which can be considered a background layer in which the display image can be un-

displayed or faded into the background by the user. Katsurabayashi teaches an integrated layer and also teaches a writing layer which apply to both the participant and the moderator (Katsurabayashi column 7, lines 35-67 and column 8, lines 1-10). Katsurabayashi teaches that the system allows a user to place the mode of operation in either the asynchronous mode, which means a non-sharing state and a synchronous mode, which means a sharing state. Katsurabayashi teaches the user is allowed to create any number of layers during the conference by adjusting or drawing on the previously shared image. Each adjusting will be stored on the individual computer as a series of layer data in which the user can then change the mode to synchronous and given they have permission to update the shared area they can apply the changes they have made by adding the layers to the shared image. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, in view of Katsurabayashi, because of the taught advantage of utilizing layer control and the page composition of a plurality of layers where a user individual status for sharing information depends on the state of the application and permissions.

- *Wherein the moderator input-device is further adapted to select participant layers from any of the participant workstations that are then copied to the moderator's participant layer, (Katsurabayashi column 9, lines 50-67 and column 10, lines 9-57)* Katsurabayashi teaches the ability to control the process of sending a layer to others at intervals or with instruction and Katsurabayashi teaches the ability to request access to information in the shared space which would allow someone to make a request for information from participant where a layer is stored on an individual machine and the file is sent to the requestor.
- *Wherein the network can be used in a group mode and a standalone mode;* (Katsurabayashi column 7, lines 5-40) Katsurabayashi teaches the system allows each user to control the sharing mode from either asynchronous to synchronous.

Further, Katsurabayashi teaches that all of the users can be synchronous or where any combination of users can be in asynchronous mode, which would include one user in asynchronous and the others in synchronous.

- *Wherein every user positioned to use a workstation can hear every other user positioned to use any other workstation;*(Katsurabayashi column 8, lines 1-15 and column 20, lines 40-50 Katsurabayashi teaches the recording and playback of multimedia which includes video and audio and the use of a microphone. The data is stored into the individual layers and submitted by the user each time they make a change or contribution. Further, Katsurabayashi teaches the playback time starts after the playback is invoked, which as the user is in synchronous mode would be immediately. Therefore, each user on the network can hear a specific person that has permission to update the shared space or all of the users that have permission.
- *Wherein data structures defining the images are stored in the database*
(Katsurabayashi Figure 4A) Katsurabayashi teaches the data structures are stored in a database, which define a layer that includes images (see also column 12, lines 5-8 and 35-40).

With respect to **dependent claims 58 and 59**, *Katsurabayashi teaches the network wherein images placed on a participant's work area at a participant workstation may be viewed only at that workstation unless an instruction to permit the images to be viewed from another workstation is given at the participant workstation providing the participant's work area* (Katsurabayashi column 7, lines 5-25 and column 8, lines 1-5 and column 13, lines 1-5). Katsurabayashi teaches the individual submits the request to be in either the synchronous or asynchronous mode. While in the asynchronous mode no other person can see the space on the individual workstation without permission. Katsurabayashi also teaches where the data sent is transferred over the network of computers (see figure 2 and column 24, lines 25-30).

With respect to **dependent claim 60 - 63**, Katsurabayashi teaches the network further comprising collision-correction functionality and layers and relocating images. **In the alternative, if the “view mode” is interpreted as meaning “a layer control exists to allow a user to undisplay or control what is displayed and when ”, then the following rejection applies.** In the present application specification, the applicant defines collision control as permitting users to work around collisions as they occur in the workspace and where participants can toggle through modes showing the layer with the collision of images, with only the first image submitted and the shared space (see page 10, Para 3 and 4). Katsurabayashi teaches the ability to control through a layer control and undisplay mode the display of images. Taken in combination with the asynchronous and synchronous control the users would be able to work around conflicts by adjusting the layers visible or non-visible and adjusting which layers are sent to the workspace when a collision occurs (Column 7, lines 5-40 and column 11, lines 25-45 and column 12, lines 1-36). Further, because of the ability for an individual user to control the layers by Id number and the sequence in how they are displayed and in combination with the permissions a moderator could be the only one with the permission to update and therefore would be able to display just the moderator integrated layer or be able to control the undisplay layer which is a background layer. If just one participant had access then just the participants layer would be displayed but other layers would also exist in the page and the same participant would be able to view the conflict or collision with another participant and is provided with the ability to move the image with a move command (column 15, lines 25-32).

With respect to **dependent claim 65**, Katsurabayashi teaches the network further comprising collision-avoidance functionality (Katsurabayashi column 23, lines 50-67). Katsurabayashi teaches a collision avoidance mechanism where collision are avoided through a permission mechanism.

With respect to **dependent claim 66**, Katsurabayashi teaches the network wherein the collision-avoidance functionality comprises an area on the participant layers that does not overlap with either the background layer or the moderator layer (Katsurabayashi column 7, lines 5-45 and 65-67 and column 8, lines 1-5 and column 19, lines 5-20) Katsurabayashi teaches that user permissions control the access to a shared area and collision avoidance. Katsurabayashi also teaches where there are layers within a page and where the user has the choice to set a page layer to display or not. Further, Katsurabayashi teaches that a given page is a combination of shared and individual data and when a user move the mode of the application into asynchronous then the user is not sharing with other but has shared data in the area. The user also has the ability of layer control where they can choose which layers are integrated or not which would allow for a layer to be created and does not overlap the moderator or background layer (column 12, lines 5-50).

In regard to **Independent claim 68**, Katsurabayashi teaches the network of computers programmed for knowledge transfer in a group setting, the network comprising:

- *A server comprising a database;* (Katsurabayashi column 9, lines 5-15 and Figure 2 and 4a and 4b) Katsurabayashi teaches the data is stored on a network computer on a hard disk, memory or other storage. Katsurabayashi also teaches that the data is stored in an indexed manner and is retrieved in an indexed manner, which would indicate a database for storing information. Further, a networked computer is analogous to a server.
- *A plurality of participant workstations, each programmed to provide a participant work area and having at least one corresponding participant input-device, each of the participant input-devices being adapted to create data structures defining participant images that are then included on the participant work area;;*(Katsurabayashi Figure 12) shows a plurality of workstations and where the user can switch the computer to

asynchronous mode which allows the user to have a private space. Katsurabayashi further teaches the input of images in the work area and where the system records media as it is input in the display through input devices such as a microphone, camera and mouse etc.

- A moderator workstation, programmed to provide a moderator work area and comprising at least one moderator input-device, the at least one moderator input-device being adapted to:
 - Create data structures defining moderator images that are then included on the moderator work area,
 - To select moderator images that are then simultaneously included on each of the plurality of participant work areas;
 - Wherein the moderator work area comprises a main layer, a moderator layer, a participant layer, and a background layer; Wherein each participant work area comprises:
 - A main layer;
 - A participant layer;
 - A moderator layer common to the moderator work area;
 - A background layer common to the moderator work area;

In the alternative, if the “main, background, participant and moderator layer” is interpreted as meaning “a layer constitutes data for one screen image and where multiple images and layers can exist on the display overlapped”, then the following rejection applies. Katsurabayashi teaches a display where the page in the display is comprised of a spatial series of layers. Katsurabayashi teaches a display layer, which can be considered the main layer. Katsurabayashi further teaches a un-display layer which can be considered a background layer in which the display image can be un-displayed or faded into the background by the user. Katsurabayashi teaches an integrated layer and also teaches a writing layer which apply to both the participant and the moderator (Katsurabayashi column 7, lines 35-67 and column 8, lines 1-10). Katsurabayashi teaches that the system allows a user to place the mode of operation in either the asynchronous mode, which means a non-sharing state and a synchronous mode, which means a sharing state. Katsurabayashi teaches the user is allowed to create any number of layers during the conference by adjusting or drawing on the previously shared image. Each adjusting will be stored on the individual computer as a series of layer data in which the user can then change the mode to synchronous and given they have permission to update the shared area they can apply the changes they have made by adding the layers to the shared image. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, in view of Katsurabayashi, because of the taught advantage of utilizing layer control and the page composition of a plurality of layers where a user individual status for sharing information depends on the state of the application and permissions.

- Collision-correction functionality; **In the alternative, if the “view mode” is interpreted as meaning “a layer control exists to allow a user to undisplay or control what is displayed and when”, then the following rejection applies.** In the present application

specification, the applicant defines collision control as permitting users to work around collisions as they occur in the workspace and where participants can toggle through modes showing the layer with the collision of images, with only the first image submitted and the shared space (see page 10, Para 3 and 4). Katsurabayashi teaches the ability to control through a layer control and undisplay mode the display of images. Taken in combination with the asynchronous and synchronous control the users would be able to work around conflicts by adjusting the layers visible or non-visible and adjusting which layers are sent to the workspace when a collision occurs (Column 7, lines 5-40 and column 11, lines 25-45 and column 12, lines 1-36). Further, because of the ability for an individual user to control the layers by Id number and the sequence in how they are displayed and in combination with the permissions a moderator could be the only one with the permission to update and therefore would be able to display just the moderator integrated layer or be able to control the undisplay layer which is a background layer. If just one participant had access then just the participants layer would be displayed but other layers would also exist in the page and the same participant would be able to view the conflict or collision with another participant and is provided with the ability to move the image with a move command (column 15, lines 25-32).

- Wherein the data structures are stored in the database; (Katsurabayashi Figure 4A) Katsurabayashi teaches the data structures are stored in a database, which define a layer that includes images (see also column 12, lines 5-8 and 35-40).
- Wherein the moderator input-device is further adapted to select participant layers from any of the plurality of participant work areas that are then copied to the participant layer on the moderator's virtual drawing surface; (Katsurabayashi column 9, lines 50-67 and column 10, lines 9-57) Katsurabayashi teaches the ability to control the process of sending a layer to others at intervals or with instruction and Katsurabayashi teaches the ability to request access to information in the shared space which would allow someone

to make a request for information from participant where a layer is stored on an individual machine and the file is sent to the requestor.

- Wherein a participant layer may only be selected to be copied to the participant layer on the moderator's virtual drawing surface after an instruction has been given at the participant workstation upon which the participant layer resides; (Katsurabayashi column 7, lines 5-25 and column 8, lines 1-5 and column 13, lines 1-5) Katsurabayashi teaches the individual submits the request to be in either the synchronous or asynchronous mode. While in the asynchronous mode no other person can see the space on the individual workstation without permission. Katsurabayashi also teaches where the data sent is transferred over the network of computers (see figure 2 and column 24, lines 25-30).
- Wherein the network can be used in a group mode and a standalone mode; (Katsurabayashi column 7, lines 5-40) Katsurabayashi teaches the system allows each user to control the sharing mode from either asynchronous to synchronous. Further, Katsurabayashi teaches that all of the users can be synchronous or where any combination of users can be in asynchronous mode, which would include one user in asynchronous and the others in synchronous.
- Wherein every user positioned to use a workstation can hear every other user positioned to use any other workstation;(Katsurabayashi column 8, lines 1-15 and column 20, lines 40-50 Katsurabayashi teaches the recording and playback of multimedia which includes video and audio and the use of a microphone. The data is stored into the individual layers and submitted by the user each time they make a change or contribution. Further, Katsurabayashi teaches the playback time starts after the playback is invoked, which as the user is in synchronous mode would be immediately. Therefore, each user on the network can hear a specific person that has permission to update the shared space or all of the users that have permission.

With respect to **dependent claims 69 -71**, Katsurabayashi teaches the network wherein the collision-correction functionality comprises functionality permitting toggling between a plurality of view modes displaying specific layers, a permitting the relocating of images. **In the alternative, if the “view mode” is interpreted as meaning “a layer control exists to allow a user to undisplay or control what is displayed and when ”, then the following rejection applies.** In the present application specification, the applicant defines collision control as permitting users to work around collisions as they occur in the workspace and where participants can toggle through modes showing the layer with the collision of images, with only the first image submitted and the shared space (see page 10, Para 3 and 4). Katsurabayashi teaches the ability to control through a layer control and undisplay mode the display of images. Taken in combination with the asynchronous and synchronous control the users would be able to work around conflicts by adjusting the layers visible or non-visible and adjusting which layers are sent to the workspace when a collision occurs (Column 7, lines 5-40 and column 11, lines 25-45 and column 12, lines 1-36). Further, because of the ability for an individual user to control the layers by Id number and the sequence in how they are displayed and in combination with the permissions a moderator could be the only one with the permission to update and therefore would be able to display just the moderator integrated layer or be able to control the undisplay layer which is a background layer. If just one participant had access then just the participants layer would be displayed but other layers would also exist in the page and the same participant would be able to view the conflict or collision with another participant and is provided with the ability to move the image with a move command (column 15, lines 25-32).

With respect to **dependent claims 73**, Katsurabayashi teaches the network further comprising collision-avoidance functionality (Katsurabayashi column 23, lines 50-67). Katsurabayashi teaches a collision avoidance mechanism where collision are avoided through a permission mechanism.

With respect to **dependent claim 74**, Katsurabayashi teaches the network wherein the collision-avoidance functionality comprises a margin in the participant layer that does not overlap with either the moderator layer or the background layer (Katsurabayashi column 7, lines 5-45 and 65-67 and column 8, lines 1-5 and column 19, lines 5-20) Katsurabayashi teaches that user permissions control the access to a shared area and collision avoidance. Katsurabayashi also teaches where there are layers within a page and where the user has the choice to set a page layer to display or not. Further, Katsurabayashi teaches that a given page is a combination of shared and individual data and when a user move the mode of the application into asynchronous then the user is not sharing with other but has shared data in the area. The user also has the ability of layer control where they can choose which layers are integrated or not which would allow for a layer to be created and does not overlap the moderator or background layer (column 12, lines 5-50).

In regard to **Independent claim 75**, Katsurabayashi teaches the system for knowledge transfer in a group setting, the system comprising:

- A server comprising a database; (Katsurabayashi column 9, lines 5-15 and Figure 2 and 4a and 4b) Katsurabayashi teaches the data is stored on a network computer on a hard disk, memory or other storage. Katsurabayashi also teaches that the data is stored in an indexed manner and is retrieved in an indexed manner, which would indicate a database for storing information. Further, a networked computer is analogous to a server.
- A plurality of participant work stations, each comprising: at least one participant display device; at least one input device; (Katsurabayashi Figure 2) Katsurabayashi teaches a input device and a display.

- *A participant virtual drawing surface, comprising: a main layer; a moderator layer; a participant layer; a background layer; the at least one participant input device being adapted to permit the participant to create data structures defining images that are organized into the participant layer and displayed on the at least one participant display device; (Katsurabayashi Figure 3 and 30 and column 24, lines 30-40).*

Katsurabayashi teaches a virtual drawing surface and a pen computing system. A moderator work station, comprising: at least one moderator display device; at least one moderator input-device; a moderator virtual drawing surface, comprising: a main layer; a moderator layer; a participant layer; a background layer; the at least one moderator input device being adapted to create data structures that are organized into the moderator layer and defining images that are displayed on the at least one moderator display device and on each of the at least one participant display devices;

In the alternative, if the “main, background, participant and moderator layer” is interpreted as meaning “a layer constitutes data for one screen image and where multiple images and layers can exist on the display overlapped”, then the following rejection applies. Katsurabayashi teaches a display where the page in the display is comprised of a spatial series of layers. Katsurabayashi teaches a display layer, which can be considered the main layer. Katsurabayashi further teaches a un-display layer which can be considered a background layer in which the display image can be un-displayed or faded into the background by the user. Katsurabayashi teaches an integrated layer and also teaches a writing layer which apply to both the participant and the moderator (Katsurabayashi column 7, lines 35-67 and column 8, lines 1-10).

Katsurabayashi teaches that the system allows a user to place the mode of operation in either the asynchronous mode, which means a non-sharing state and a synchronous mode, which means a sharing state. Katsurabayashi teaches the user is allowed to create any number of layers during the conference by adjusting or drawing on the previously shared image. Each adjusting will be stored on the individual computer as a

series of layer data in which the user can then change the mode to synchronous and given they have permission to update the shared area they can apply the changes they have made by adding the layers to the shared image. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention, in view of Katsurabayashi, because of the taught advantage of utilizing layer control and the page composition of a plurality of layers where a user individual status for sharing information depends on the state of the application and permissions.

- Wherein the data structures are stored in the database (Katsurabayashi Figure 4A)
Katsurabayashi teaches the data structures are stored in a database, which define a layer that includes images (see also column 12, lines 5-8 and 35-40).

With respect to **dependent claim 76**, Katsurabayashi teaches the system wherein the moderator input-device is further adapted to select images on any of the plurality of participant layers that are then copied to the participant layer of moderator virtual drawing surface (Katsurabayashi column 7, lines 5-25 and column 8, lines 1-5 and column 13, lines 1-5) Katsurabayashi teaches the individual submits the request to be in either the synchronous or asynchronous mode. While in the asynchronous mode no other person can see the space on the individual workstation without permission. Katsurabayashi also teaches where the data sent is transferred over the network of computers (see figure 2 and column 24, lines 25-30). Katsurabayashi also teaches a copy command where information is copied into a specified layer (column 15, lines 20-30).

With respect to **dependent claim 77**, Katsurabayashi teaches the system further comprising at least one member of the set consisting of a video recording device and an audio recording device (Katsurabayashi column 8, lines 5-10) Katsurabayashi teaches the a video and audio recording device.

With respect to **dependent claim 78**, Katsurabayashi teaches the system of claim wherein a session can be replayed on the moderator display device and on each of the at least one participant display devices by adding images corresponding to the data structures to a composite image in the order the data structures were created (Katsurabayashi column 23, lines 1-35) Katsurabayashi teaches the ability to sequence and replay a series of images as they are ordered by a particular user. The process of ordering would include the ability to select, delete and add images to place in a specific sequence.

With respect to **dependent claim 79**, Katsurabayashi teaches the system further comprising at least one member of the set consisting of a video recording device and an audio recording device (Katsurabayashi column 8, lines 5-10) Katsurabayashi teaches the a video and audio recording device.

With respect to **dependent claim 80**, Katsurabayashi teaches the system wherein the images corresponding to the data structures can be added to the composite image one at a time in response to an instruction (Katsurabayashi column 9 lines 35-50) Katsurabayashi teaches the data can be submitted in intervals or per instruction by the user which would allow for the user to enter one image at a time.

With respect to **dependent claim 81**, Katsurabayashi teaches the system further comprising:

- At least one member of the set consisting of a video playback device and an audio playback device; (Katsurabayashi column 8, lines 5-10) Katsurabayashi teaches the video and audio recording device.
- Wherein a recording can be played back on the member of the set in synchronization with the data structures, such that the images corresponding to the data structures are added to the composite image at points in time corresponding to the points in the recording where the data

structures were created (Katsurabayashi column 12, lines 1-5 and column 21, lines 30-40 and column 24, lines 15-21) Katsurabayashi teaches where the layers are arranged in a sequence to be determined by the user and where a audio recording occurs with the layer of creation so comments are attached to the image of focus and where the audio/video timing occurs at the same time the image or focal point is created.

References to specific columns, figures or lines should not be limiting in any way. The entire reference provides disclosure related to the claimed invention.

Claim Rejections - 35 USC § 103

8. **The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:**

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 25-35, 37-38, 40-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katsurabayashi et al (hereinafter Katsurabayashi) U.S. Patent No. 5,996,002 issued Nov. 30, 1999 and filed Jul. 23, 1997, in view of McArdle et al. (hereinafter McArdle) U.S. Patent No. 5,859,974 issued Jan. 12, 1999 and filed Jul. 8, 1996.**

In regard to **Independent claim 25**, Katsurabayashi teaches a network of computers programmed for knowledge transfer in a group setting, the network comprising:

- *A server comprising a database;* (Katsurabayashi Fig. 1, 2, 3, 4A and column 9, lines 5-35) Katsurabayashi teaches a database and network of computers connected

together for the purpose of group collaboration and for storing individual and shared images, video, audio and media as layers in memory separately.

- *A plurality of participant workstations, each programmed to provide a participant work area and having at least one corresponding participant input-device, and each of the participant input-devices being adapted to create data structures defining participant images that are then included on the participant work area;* (Katsurabayashi Figure 12) shows a plurality of workstations and where the user can switch the computer to asynchronous mode which allows the user to have a private space. Katsurabayashi further teaches the input of images in the work area and where the system records media as it is input in the display through input devices such as a microphone, camera and mouse etc.

- *A moderator workstation, programmed to provide a moderator work area and comprising at least one moderator input-device, the at least one moderator input-device being adapted to:*
 - *Create data structures defining moderator images that are then included on the moderator work area, and*
 - *Select moderator images that are then simultaneously included on each of plurality of participant work areas;*
(Katsurabayashi column 7, lines 7-35 and column 8, lines 20-45)

Katsurabayashi teaches an individual can retain the permission to update the shared area while all other participants would not have the permission to update. By updating the shared space a CEO could give a discussion and use the input device while all others watch the presentation in synchronous mode. The CEO could switch back and forth between synchronous and asynchronous mode to create and draw on the space and then submit the changes to shared space, which would then be presented on the shared space of every individual.

- *Wherein the data structures are stored in the database;* (Katsurabayashi fig.4a-4b and column 9, lines 5-15) Katsurabayashi shows the storage of requests, layers and timing information in a database.

- Wherein each participant workstation displays images placed on the participant's public scroll by the moderator superimposed on images placed on the participant's public scroll by the participant; (Katsurabayashi fig 2 and 3) Katsurabayashi teaches a layer mechanism which allows for the superimposing of images on top of one another and where one person that has permission can request information from a particular machine and copy the information in the shared area which would then be displayed on all of the participants work areas.
- *Wherein the moderator input-device is further adapted to select participant images from any of the plurality of participant work areas that are then included on the moderator work area* (Katsurabayashi column 9, lines 50-67 and column 10, lines 9-57) Katsurabayashi teaches the ability to control the process of sending a layer to others at intervals or with instruction and Katsurabayashi teaches the ability to request access to information in the shared space which would allow someone to make a request for information from participant where a layer is stored on an individual machine and the file is sent to the requestor.

Katsurabayashi fails to expressly teach:

- Wherein the moderator work area comprises a moderator public scroll and a moderator private scroll, and each participant work area comprises a participant public scroll and a participant private scroll;

In the present application specification, the applicant defines the scroll as a scroll feature that is known in the common art and that a given panel can be scrolled both horizontally and vertically. (Page 13 Para 1, lines 6-8) Given the applicant's definition, McArdle teaches a collaborative work system that utilizes a shared and private workspace in which both the shared and private workspaces are scrollable. McArdle also includes storage for a plurality of pages that can also be scrolled both horizontally and vertically for the purpose of allowing the user to store information in

a given panel that is larger than the display area and using a scroll control to shift the display area to see the occluded section of the displayed image (McArdle Figure 4 and column 5, lines 1-50). McArdle and Katsurabayashi are analogous art because they both are collaborative work group systems that allow users to share the creation of images among a plurality of users.

Accordingly, It would have been obvious to one of ordinary skill in the art, having the teachings of Katsurabayashi and McArdle before him at the time of the invention was made, to modify the system of Katsurabayashi to incorporate the scrollable private and shared area as taught by McArdle, in order to obtain a system that is able to allow a user to utilize more of the panel area and scroll the panel to see the occluded images. One would have been motivated to make such a combination because of the taught advantage of allowing users in a conventional manner to select images in a two-dimensional area as taught by McArdle (McArdle column 5, lines 25-35).

With respect to **dependent claim 26**, Katsurabayashi teaches the network wherein the network can be used in a group mode and a standalone mode (Katsurabayashi column 7, lines 5-40) Katsurabayashi teaches the system allows each user to control the sharing mode from either asynchronous to synchronous. Further, Katsurabayashi teaches that all of the users can be synchronous or where any combination of users can be in asynchronous mode, which would include one user in asynchronous and the others in synchronous.

With respect to **dependent claims 27 - 28**, Katsurabayashi teaches the network wherein the workstations are located such that a first user positioned to use a workstation and a second user positioned to use a different workstation can hear each other speak (Katsurabayashi column 8, lines 1-15 and column 20, lines 40-50 Katsurabayashi teaches the recording and playback of multimedia which includes video and audio and the use of a microphone. The data is stored into

the individual layers and submitted by the user each time they make a change or contribution. Further, Katsurabayashi teaches the playback time starts after the playback is invoked, which as the user is in synchronous mode would be immediately. Therefore, each user on the network can hear a specific person that has permission to update the shared space or all of the users that have permission.

With respect to **dependent claim 29**, Katsurabayashi teaches the network wherein the data structures defining the images are organized in notebook data structures comprising at least one panel (Katsurabayashi column 23, lines 1-32) Katsurabayashi teaches a screen where the layers are displayed in a sequence depicting a discussion flow or group opinion flow. The sequencing of opinions show how the discussion changed points 9column 24, lines 60-67) which is analogous to writing in a notebook as a sequence of steps.

With respect to **dependent claim 30**, Katsurabayashi teaches the network wherein the data structures defining the images comprise at least one object in a single panel (Katsurabayashi Figure 3) Katsurabayashi teaches a single page comprised of a plurality of layers with at least one object in the panel. Column 7, lines 35-67).

With respect to **dependent claims 31 and 32**, Katsurabayashi teaches the network wherein images placed on a participant's work area at a participant workstation may be viewed only at that workstation unless an instruction to permit the images to be viewed from another workstation is given at the participant workstation providing the participant's work area (Katsurabayashi column 7, lines 5-25 and column 8, lines 1-5 and column 13, lines 1-5) Katsurabayashi teaches the individual submits the request to be in either the synchronous or asynchronous mode. While in the asynchronous mode no other person can see the space on the individual workstation

without permission. Katsurabayashi also teaches where the data sent is transferred over the network of computers (see figure 2 and column 24, lines 25-30).

With respect to **dependent claims 33 - 35**, Katsurabayashi teaches the network further comprising collision-correction functionality **In the alternative, if the "view mode" is interpreted as meaning "a layer control exists to allow a user to undisplay or control what is displayed and when ", then the following rejection applies.** In the present application specification, the applicant defines collision control as permitting users to work around collisions as they occur in the workspace and where participants can toggle through modes showing the layer with the collision of images, with only the first image submitted and the shared space (see page 10, Para 3 and 4). Katsurabayashi teaches the ability to control through a layer control and undisplay mode the display of images. Taken in combination with the asynchronous and synchronous control the users would be able to work around conflicts by adjusting the layers visible or non-visible and adjusting which layers are sent to the workspace when a collision occurs (Column 7, lines 5-40 and column 11, lines 25-45 and column 12, lines 1-36).

With respect to **dependent claims 37**, Katsurabayashi teaches the network further comprising collision-avoidance functionality (Katsurabayashi column 23, lines 50-67) Katsurabayashi teaches a collision avoidance mechanism where collision are avoided through a permission mechanism.

With respect to **dependent claim 38**, Katsurabayashi teaches the network wherein the collision-avoidance functionality comprises an area on the participant's work area that does not have a corresponding location to any location on the shared work area (Katsurabayashi column 7, lines 65-67 and column 8, lines 1-5 and column 12, lines 14-24). Katsurabayashi teaches the ability of a user to designate a layer that is to be displayed or not and therefore a given participant can

write on a layer and not submit the layer and mark it to not be displayed which would be a margin area that is not displayed on the shared workspace.

With respect to **dependent claim 40**, Katsurabayashi teaches the network wherein each participant work area comprises a main layer, a background layer, a participant layer, and a moderator layer **In the alternative, if the “main, background, participant and moderator layer” is interpreted as meaning “a layer constitutes data for one screen image and where multiple images and layers can exist on the display overlapped ”, then the following rejection applies.** Katsurabayashi teaches a network of computers (see Figure 2).

Katsurabayashi also teaches a display where the page in the display is comprised of a spatial series of layers. Katsurabayashi teaches a display layer, which can be considered the main layer. Katsurabayashi further teaches a un-display layer which can be considered a background layer in which the display image can be un-displayed or faded into the background by the user.

Katsurabayashi teaches an integrated layer and also teaches a writing layer which apply to both the participant and the moderator (Katsurabayashi column 7, lines 35-67 and column 8, lines 1-10). Katsurabayashi teaches that the system allows a user to place the mode of operation in either the asynchronous mode, which means a non-sharing state and a synchronous mode, which means a sharing state. Katsurabayashi teaches the user is allowed to create any number of layers during the conference by adjusting or drawing on the previously shared image. Each adjusting will be stored on the individual computer as a series of layer data in which the user can then change the mode to synchronous and given they have permission to update the shared area they can apply the changes they have made by adding the layers to the shared image.

With respect to **dependent claim 41**, Katsurabayashi teaches the network wherein the collision-avoidance functionality comprises providing a margin on the participant layer that does not overlap with either of the background layer and moderator layer (Katsurabayashi column 7, lines

5-45 and 65-67 and column 8, lines 1-5 and column 19, lines 5-20) Katsurabayashi teaches that user permissions control the access to a shared area and collision avoidance. Katsurabayashi also teaches where there are layers within a page and where the user has the choice to set a page layer to display or not. Further, Katsurabayashi teaches that a given page is a combination of shared and individual data and when a user move the mode of the application into asynchronous then the user is not sharing with other but has shared data in the area. The user also has the ability of layer control where they can choose which layers are integrated or not which would allow for a layer to be created and does not overlap the moderator or background layer (column 12, lines 5-50).

Allowable Subject Matter

10. Claims **19, 22-24, 36, 39, 53, 56, 64, 67, 72** are allowed.
11. The following is a statement of reasons for the indication of allowable subject matter:

With respect to **dependent claims 19, 36, 53, 64, 72**, Katsurabayashi in view of McArdle teach/disclose the movement of images in a collaborative workspace that have private and public areas that are scrollable by the users. The prior art also teaches access rights to objects preventing overwrites in those areas.

The prior art fails to disclose or suggest the automatic relocation of images that occur automatically when a collision of two images in the same location on the workspace occurs. Accordingly, claims 19, 36, 53, 64, and 72 are allowable subject matter.

With respect to **dependent claims 22, 23, 39, 56, 67** Katsurabayashi in view of McArdle teach/disclose collision avoidance functionality where permissions are granted to certain users thus allowing for an organized submission of information.

The prior art fails to teach where the collision-avoidance functionality comprises functionality that permits the participant to place footnote images on the participant work area that provide a link between the footnote images and corresponding images placed on a portion of the participant work area that is not superimposed on the shared work area as recited in the claims. Accordingly, claims **22, 23, 39, 56, and 67** are allowable subject matter.

With respect to **dependent claim 24**, claim 24 depends on claim 23 and is thus allowable for the same reasons stated above.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6,76,356 to Krautter issued Jul. 20, 2004 and filed Sept. 14, 2000 and discloses a method for remotely modifying presentations in a multimedia conference.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven B. Theriault whose telephone number is (571) 272-5867. The examiner can normally be reached on M-F 7:30 - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Weilun Lo can be reached on (571) 272-4847. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2179

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SBT

BA HUYNH
PRIMARY EXAMINER